

Title (en)  
DESIGN OF SYMBOL-GROUP BASED SPREADING SCHEMES

Title (de)  
ENTWURF VON AUF SYMBOLGRUPPEN BASIERENDEN SPREIZSCHEMATA

Title (fr)  
CONCEPTION DE SCHÉMAS D'ÉTALEMENT BASÉS SUR DES GROUPES DE SYMBOLES

Publication  
**EP 3878105 A4 20211103 (EN)**

Application  
**EP 18930308 A 20181109**

Priority  
CN 2018114787 W 20181109

Abstract (en)  
[origin: WO2020034457A1] Methods, systems, and devices for the design of symbol-group based spreading schemes are described. An exemplary method for wireless communication includes transmitting, by a terminal, a first spread signal that is generated by spreading a first group of N data symbols using a first set of N sequences, where N is a symbol-group length, L is a spreading length, each of the first set of N sequences is from an orthogonal spreading sequence set that comprises L sequences, and each of the L sequences is of length L. Another exemplary method for wireless communication includes transmitting, by a network node, an indication of a first set of N sequences, and receiving a first spread signal comprising a group of N data symbols spread using the first set of N sequences.

IPC 8 full level  
**H04B 7/00** (2006.01); **H04J 13/18** (2011.01)

CPC (source: EP KR US)  
**H04B 1/70735** (2013.01 - US); **H04J 13/0059** (2013.01 - US); **H04J 13/18** (2013.01 - EP KR); **H04L 1/0003** (2013.01 - US); **H04L 5/0026** (2013.01 - KR); **H04L 5/026** (2013.01 - US); **H04B 2001/70706** (2013.01 - US); **Y02D 30/70** (2020.08 - EP)

Citation (search report)

- [X] US 2018077685 A1 20180315 - WU YIQUN [CN], et al
- [A] ZTE: "Updated text proposal to TR 38.812 (NOMA)", vol. RAN WG1, no. Chengdu, China; 20181008 - 20181012, 11 October 2018 (2018-10-11), XP051519300, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/tsg%5Fran/WG1%5FRL1/TSGR1%5F94b/Docs/R1%2D1811976%2Ezip> [retrieved on 20181011]
- [A] MEDIATEK INC: "New uplink non-orthogonal multiple access schemes for NR", vol. RAN WG1, no. Gothenburg, Sweden; 20160822 - 20160826, 21 August 2016 (2016-08-21), XP051125965, Retrieved from the Internet <URL:http://www.3gpp.org/ftp/Meetings\_3GPP\_SYNC/RAN1/Docs/> [retrieved on 20160821]
- See references of WO 2020034457A1

Designated contracting state (EPC)  
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

Designated extension state (EPC)  
BA ME

DOCDB simple family (publication)  
**WO 2020034457 A1 20200220**; CN 112956132 A 20210611; CN 112956132 B 20221021; EP 3878105 A1 20210915; EP 3878105 A4 20211103; KR 102611237 B1 20231206; KR 20210089230 A 20210715; US 11637583 B2 20230425; US 2021281288 A1 20210909

DOCDB simple family (application)  
**CN 2018114787 W 20181109**; CN 201880098974 A 20181109; EP 18930308 A 20181109; KR 20217017737 A 20181109; US 202117306609 A 20210503